IN THE CLAIMS:

1-5. (canceled)

6. (currently amended) A method of embedding oil well steel pipes having smaller diameters one after another[[,]] comprising:

selecting a steel pipe to be expanded in a well as part of the embedding method, wherein the selected steel pipe has ~~characterized by using the steel pipe that could be expanded in a well, characterized in that~~ a non-uniform wall thickness ratio E0 of the steel pipe before expanding that satisfies the following expression 1;

$E0 < 30 / (1 + 0.018\alpha)$

wherein α is a pipe expansion ratio calculated by the following expression 2; ~~and E0 is calculated by the following expression 3;~~

α = ((inner diameter of the pipe after expanding – inner diameter of the pipe before expanding) / inner diameter of the pipe before expanding) x 100 . . . 2; and

E0 is calculated by the following expression 3;

E0 = ((maximum wall thickness of the pipe before expanding – minimum wall thickness of the pipe before expanding) / average wall thickness of the pipe before expanding) x 100 . . . 3

and ~~further characterized by the steps of~~;

embedding a steel pipe in an excavated well,

further excavating the underground on the front end of the embedded steel pipe to deepen the well,

inserting a second steel pipe, whose outer diameter is smaller than the inner diameter of the embedded steel pipe, into the embedded steel pipe, and embedding the second steel pipe in the deepened portion of the well,

expanding the second steel pipe radially by a tool inserted therein to increase the diameter,

further excavating the underground on the front end of the expanded steel pipe to deepen the well,

inserting a third steel pipe, whose outer diameter is smaller than the inner diameter of the expanded steel pipe, into the expanded steel pipe, and embedding the [[a]] third steel pipe in the deepened portion of the well,

expanding the third steel pipe radially, and

repeating said steps;

wherein the second and third steel pipes are the selected steel pipes and using the selected steel pipes as the second and third steel pipes improves collapse strength and resistance to bending during the expanding steps.

7. (canceled)

8. (canceled)

9. (canceled)

10-13. (canceled)

14. (previously presented) The method according to claim 6 characterized by using a steel pipe consisting of, by mass %, C: 0.1 to 0.45%, Si: 0.1 to 1.5%, Mn: 0.1 to 3%, P: 0.03% or less, S; 0.01% or less, sol. Al: 0.05% or less, N: 0.01% or less, Ca: 0. to 0.005%, and the balance Fe and impurities.

15. (previously presented) The method according to claim 6 characterized by using a steel pipe consisting of, by mass %, C: 0.1 to

0.45%, Si: 0.1 to 1.5%, Mn: 0.1 to 3%, P: 0.03% or less, S; 0.01% or less, sol. Al: 0.05% or less, N: 0.01% or less, Ca: 0. to 0.005%, one or more of Cr: 0.2 to 1.5%, Mo: 0.1 to 0.8% and V: 0.005 to 0.2%, and the balance Fe and impurities.

16. (previously presented) The method according to claim 6 characterized by using a steel pipe consisting of, by mass %, C: 0.1 to 0.45%, Si: 0.1 to 1.5%, Mn: 0.1 to 3%, P: 0.03% or less, S; 0.01% or less, sol. Al: 0.05% or less, N: 0.01% or less, Ca: 0. to 0.005%, one or both of Ti: 0.005 to 0.05% and Nb: 0.005 to 0.1%, and the balance Fe and impurities.